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EXAMINER

GELAGAY, SHEWAYE

ART UNIT PAPER NUMBER

2133

DATE MAILED: 01/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/981,410

Applicant(s)

APPLEBAUM, DAVID C.

Examiner

Shewaye Gelagay

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 01/29/2002.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-42 have been examined.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 31, 32 and 33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 31, 32 and 33 recite the preamble "an information appliance." However, the independent claim 22 in which claim 31 depends on is a method claim. Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-3, 12-17, 22, 24 and 27-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Gungl et al. United States Letter Patent Number 5,912,453.

As per claim 1:

Gungl et al. teach a method of storing information on an information appliance comprising:

forming a string having a plurality of delimited segments, (Col. 4, lines 1-3 and Col. 9, lines 22-25) wherein each of said plurality of delimited segments comprises:

a delimiter defining a known bit pattern; (Col. 4, lines 34-39; Col. 5, lines 31-33 and Col. 9, 16-17) and

a segment containing information associated with applications that interact with said information appliance; (Col. 3, lines 35-38) and,

storing said string on said information appliance. (Col. 3, lines 19-22 and Col. 4, lines 36-39)

As per claim 2:

Gungl et al. teach all the subject matter as discussed above. In addition, Gungl et al. further disclose a method of storing information on an information appliance wherein each delimiter comprises the same bit pattern. (Col. 9, lines 9-11)

As per claim 3:

Gungl et al. teach all the subject matter as discussed above. In addition, Gungl et al. further disclose a method of storing information on an information appliance wherein each delimiter comprises a unique bit pattern. (Col. 9, lines 16-19)

As per claim 12:

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Gungl et al. disclose a method of accessing information stored on an information appliance comprising:

accessing a string stored on said information appliance, said string comprising a plurality of delimited segments, each of said plurality of delimited segments having a delimiter and a segment, wherein each segment represents a unique information context; (Col. 4, lines 43-47 and Col. 8, lines 24-28)

identifying a predetermined delimiter associated with a predetermined segment; (Col. 9, lines 16-19)

detecting said predetermined delimiter within said string, said predetermined delimiter indicating the location within said string of said predetermined segment; (Col. 4, lines 36-39) and,

reading said predetermined segment. (Col. 4, lines 43-47 and Col. 8, lines 24-28)

As per claim 13:

Gungl et al. teach all the subject matter as discussed above. In addition, Gungl et al. further disclose a method of accessing information stored on an information appliance wherein each delimiter comprises the same pattern of bits, (Col. 9, lines 9-11) and further comprising:

knowing prior to detecting, the relative position of said predetermined delimiter within said string;(Col. 4, lines 36-37) wherein said first predetermined delimiter is detected by reading sequentially through said string and detecting delimiters until said predetermined delimiter is located. (Col. 4, lines 39-43)

As per claim 14:

Gungl et al. teach all the subject matter as discussed above. In addition, Gungl et al. further disclose a method of accessing information stored on an information appliance wherein said predetermined segment is read by:

determining the length of said predetermined segment; (Col. 4, lines 36-39) and, reading said string by an amount based upon the determined length of said predetermined segment. (Col. 4, lines 43-47 and Col. 8, lines 24-28)

As per claim 15:

Gungl et al. teach all the subject matter as discussed above. In addition, Gungl et al. further disclose a method of accessing information stored on an information appliance wherein said predetermined segment is read by:

reading a first portion of said string adjacent to said predetermined delimiter, said first portion comprising information concerning the length of said predetermined segment; (Col. 4, lines 34-49; ... when a respective application is invoked, the initial and end addresses of the application are loaded from the application table ...) and,

reading said string by an amount based upon the length of said predetermined segment read from said first portion. (Col. 4, lines 34-49; ... the application table stores the beginning and the end of the memory area, in which a respective application is stored or executes or may execute...)

As per claim 16:

Gungl et al. teach all the subject matter as discussed above. In addition, Gungl et al. further disclose a method of accessing information stored on an information appliance wherein said predetermined segment is replaced back into said string at the

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same relative position from which said predetermined segment was read. (Col. 4, lines 39-41; each application receives the corresponding assigned memory area, preferably in a fixed manner, when the application is programmed)

As per claim 17:

Gunzl et al. teach all the subject matter as discussed above. In addition, Gunzl et al. further disclose a method of accessing information stored on an information appliance wherein:

each delimiter comprises a unique pattern of bits; (Col. 9, lines 9-11) and, said predetermined delimiter is detected utilizing random access. (Col. 4, lines 43-47 and Col. 8, lines 24-28)

As per claim 22:

Gunzl et al. teach a method of accessing information stored on an information appliance comprising:

selecting a predetermined delimiter, said predetermined delimiter identifying the location of a predetermined segment in a string stored on said information appliance, said string comprising a plurality of delimited segments; (Col. 9, lines 16-19)

locating said predetermined delimiter within said string; (Col. 8, lines 29-49)

extracting from said string, a first data portion, said first data portion comprising the length of said predetermined segment; (Col. 4, lines 43-45) and,

reading said predetermined segment from said string. (Col. 4, lines 36-39)

As per claim 24:

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Gungl et al. teach all the subject matter as discussed above. In addition, Gungl et al. further disclose a method of accessing information stored on an information appliance wherein said predetermined delimiter, said first data portion, and said predetermined segment are reunited with said string in the same relative positions from which were read. (Col. 4, lines 39-41)

As per claim 27:

Gungl et al. disclose an information appliance comprising:

a string stored therein, said string comprising a plurality of delimited segments, (Col. 4, lines 1-3 and Col. 9, lines 22-25) each of said plurality of delimited segment comprising:

a delimiter comprised of a pattern of bits; (Col. 4, lines 34-39; Col. 5, lines 31-33 and Col. 9, 16-17) and,

a segment comprising information or data unique to a predetermined application or function and wherein each of said plurality of segments is delimited by a segment identifier. (Col. 3, lines 35-38)

As per claim 28:

Gungl et al. teach all the subject matter as discussed above. In addition, Gungl et al. further disclose an information appliance wherein each delimiter is unique. (Col. 9, lines 16-19)

As per claim 29:

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Gungl et al. teach all the subject matter as discussed above. In addition, Gungl et al. further disclose an information appliance wherein each delimiter is identical. (Col. 9, lines 9-11)

As per claim 30:

Gungl et al. teach all the subject matter as discussed above. In addition, Gungl et al. further disclose an information appliance wherein each of said plurality of delimited segments further comprises a first data portion, said first data portion containing the length of the associated segment. (Col. 4, lines 36-39)

6. Claims 36-38 and 40 are rejected under 35 U.S.C. 102(e) as being anticipated by Bjorn United States Letter Patent Number 6,799,275.

As per claim 36:

Bjorn disclose a method of providing authentication and identification across distributed productivity environments comprising:

coupling at least one information appliance to a network; (see Figure 2)

storing within said information appliance, personal information sufficient to determine the identity of a user of said information appliance; (Col. 1, lines 50-53; Col. 3, line 26)

obtaining identification information from said user; (Col. 2, lines 46-48; Col. 3, line 27)

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comparing said identification information provided by said user against said personal information stored within said information appliance; (Col. 2, lines 50-51; Col. 3, lines 27-28)

allowing access to said distributed productivity environment if said personal information matches said identification information; (Col. 3, lines 36-38 and lines 45-47) and,

restricting access to said distributed productivity environment if said personal information does not match said identification information. (Col. 3, lines 47-49)

As per claim 37:

Bjorn teaches all the subject matter as discussed above. In addition, Bjorn further discusses a method of providing authentication and identification across distributed productivity environments wherein said personal information comprises a passcode stored within said information appliance. (Col. 5, lines 6-10)

As per claim 38:

Bjorn teaches all the subject matter as discussed above. In addition, Bjorn further discusses a method of providing authentication and identification across distributed productivity environments wherein said personal information comprises biometric information, wherein said identification information is obtained from said user utilizing a biometric reading device. (Col. 2, lines 46-48)

As per claim 40:

Bjorn teaches all the subject matter as discussed above. In addition, Bjorn further discusses a method of providing authentication and identification across distributed

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productivity environments wherein said personal information is compared to said identification information within said information appliance, such that personal information is not broadcast across said distributed productivity environment. (Col. 2, lines 50-51)

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 4-7, 11, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gungl et al. United States Letter Patent Number 5,912,453 and in view of Barlow et al. United States Letter Patent Number 6,038,551.

As per claim 4:

Gungl et al. teach all the subject matter as discussed above. Gungl et al. do not explicitly disclose a method of storing information on an information appliance wherein each segment is encoded with a different encryption key using the same encryption algorithm.

Barlow et al. in analogous art, however disclose a method of storing information on an information appliance wherein each segment is encoded with a different

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encryption key using the same encryption algorithm. (Col. 10, lines 49-51 and Col. 12, lines 23-27)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by Gungl et al. to include a method of storing information on an information appliance wherein each segment is encoded with a different encryption key using the same encryption algorithm. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by Barlow et al. (Col. 12, lines 27-31) in order to prevent a foreign application from ever inadvertently or intentionally mishandling the keys in a way that might cause them to be intercepted and compromised.

As per claim 5:

Gungl et al. teach all the subject matter as discussed above. Gungl et al. do not explicitly disclose a method of storing information on an information appliance wherein each segment is encrypted by a unique encryption algorithm.

Barlow et al. in analogous art, however disclose a method of storing information on an information appliance wherein each segment is encrypted by a unique encryption algorithm. (Col. 10, lines 2-19 and lines 51-55)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by Gungl et al. to include a method of storing information on an information appliance wherein each segment is encrypted by a unique encryption algorithm. This modification would have

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been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by Barlow et al. (Col. 10, lines 46-47) in order to implement the cryptographic functionality requested by each application. This way, each application stored in a segment will have its own encryption key.

As per claim 6:

Gungl et al. teach all the subject matter as discussed above. Gungl et al. do not explicitly disclose a method of storing information on an information appliance wherein said segments are encrypted using a symmetric key such that the same key is used to encrypt and decrypt.

Barlow et al. in analogous art, however disclose a method of storing information on an information appliance wherein said segments are encrypted using a symmetric key such that the same key is used to encrypt and decrypt. (Col. 11, lines 56-60)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by Gungl et al. to include a method of storing information on an information appliance wherein said segments are encrypted using a symmetric key such that the same key is used to encrypt and decrypt. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by Barlow et al. (Col. 11, lines 53-55) in order to implement one or more cryptographic functions. This way, each application stored in a segment will have an option of using different encryption algorithm.

As per claim 7:

Gungl et al. teach all the subject matter as discussed above. Gungl et al. do not explicitly disclose a method of storing information on an information appliance wherein said segments are encoded using asymmetric encryption.

Barlow et al. in analogous art, however disclose a method of storing information on an information appliance wherein said segments are encoded using asymmetric encryption. (Col. 11, lines 56-58 and Col. 12, lines 15-17)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by Gungl et al. to include a method of storing information on an information appliance wherein said segments are encoded using asymmetric encryption. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by Barlow et al. (Col. 11, lines 53-55) in order to implement one or more cryptographic functions. This way, each application stored in a segment will have an option of using different encryption algorithm.

As per claim 11:

Gungl et al. teach a method of storing information on an information appliance comprising:

forming a string having a plurality of delimited segments, (Col. 4, lines 1-3 and Col. 9, lines 22-25) wherein each of said plurality of delimited segments comprises:

a delimiter defining a known bit pattern; (Col. 4, lines 34-39; Col. 5, lines 31-33 and Col. 9, 16-17) and

a segment containing information associated with applications that interact with said information appliance; (Col. 3, lines 35-38) and,

storing said string on said information appliance. (Col. 3, lines 19-22 and Col. 4, lines 36-39)

Gungl et al. do not explicitly disclose a method of storing information on an information appliance wherein encrypting said string.

Barlow et al. in analogous art, however disclose a method of storing information on an information appliance wherein encrypting said string. (Col. 10, lines 2-19 and lines 51-55; Col. 11, lines 56-58 and Col. 12, lines 15-17)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by Gungl et al. to include a method of storing information on an information appliance wherein encrypting said string. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by Barlow et al. (Col. 12, lines 27-31) in order to prevent a foreign application from ever inadvertently or intentionally mishandling the keys in a way that might cause them to be intercepted and compromised.

As per claim 19:

Gungl et al. teach all the subject matter as discussed above. Gungl et al. do not explicitly disclose a method of accessing information on an information appliance wherein said string is encrypted while stored on said information appliance such that each of said plurality of delimited segments are unintelligible, and further comprising

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decrypting said string such that said predetermined segment is decrypted and the remainder of said plurality of delimited segments remain unintelligible.

Barlow et al. in analogous art, however disclose a method of accessing information on an information appliance wherein said string is encrypted while stored on said information appliance such that each of said plurality of delimited segments are unintelligible, and further comprising decrypting said string such that said predetermined segment is decrypted and the remainder of said plurality of delimited segments remain unintelligible. (Col. 5, lines 7-10; Col. 8, lines 22-37; Col. 10, lines 2-19 and lines 51-55; Col. 11, lines 56-58 and Col. 12, lines 15-17)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by Gungl et al. to include a method of accessing information on an information appliance wherein said string is encrypted while stored on said information appliance such that each of said plurality of delimited segments are unintelligible, and further comprising decrypting said string such that said predetermined segment is decrypted and the remainder of said plurality of delimited segments remain unintelligible. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by Barlow et al. (Col. 12, lines 27-31) in order to prevent a foreign application from ever inadvertently or intentionally mishandling the keys in a way that might cause them to be intercepted and compromised.

As per claim 20:

Gungl et al. teach all the subject matter as discussed above. Gungl et al. do not explicitly disclose a method of accessing information on an information appliance wherein: said string is encrypted using a private key such that each segment of said plurality of delimited segments is stored on said information appliance as unintelligible information, and each segment can be decrypted using an associated public key, and further comprising; and decrypting said string using a select public key associated with said predetermined segment such that said predetermined segment is decrypted and the remainder of said plurality of delimited segments remain unintelligible.

Barlow et al. in analogous art, however disclose a method of accessing information on an information appliance wherein:

said string is encrypted using a private key such that each segment of said plurality of delimited segments is stored on said information appliance as unintelligible information, and each segment can be decrypted using an associated public key, and further comprising: (Col. 5, lines 2-10 and lines 66-67; Col. 8, lines 22-37)

decrypting said string using a select public key associated with said predetermined segment such that said predetermined segment is decrypted and the remainder of said plurality of delimited segments remain unintelligible. (Col. 5, lines 2-10 and lines 66-67; Col. 8, lines 22-37)

The rationale for combining the two references is the same as claim 19 above.

9. Claims 9-10, 18, 21, 23, 25-26 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gungl et al. United States Letter Patent Number 5,912,453 and in view of Everett et al. United States Letter Patent Number 6,575,372.

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As per claim 9:

Gungl et al. teach all the subject matter as discussed above. In addition, Gungl et al. further disclose a method of storing information on an information appliance wherein a select one of said plurality of delimited segments is removed from said string by:

reading out said string; (Col. 4, lines 43-47 and Col. 8, lines 24-28)

locating said select one of said plurality of delimited segments; (Col. 8, lines 29-49)

storing said string back to said information appliance. (Col. 3, lines 19-22 and Col. 4, lines 36-39)

Gungl et al. do not explicitly disclose removing said select one of said plurality of delimited segments from said string.

Everett et al. in analogous art, however, disclose a method of removing said select one of said plurality of delimited segments from said string. (Col. 4, lines 12-14; Col. 14, lines 43-47)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by Gungl et al. to include a method removing said select one of said plurality of delimited segments from said string. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by Everett et al. (Col. 3, lines 53-56) in order to allow applications to be selectively loaded and deleted from the card, a card issuer can extend additional functionality to an individual IC card without having to issue new cards.

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As per claim 10:

Gunzl et al. teach all the subject matter as discussed above. In addition, Gunzl et al. further disclose a method of storing information on an information appliance wherein a new segment is added to said string by:

accessing said new segment; (Col. 4, lines 43-47 and Col. 8, lines 24-28)

concatenating a new delimiter to said new segment to define a new delimited segment; (Col. 4, lines 1-3 and Col. 9, lines 22-25)

reading said string; (Col. 4, lines 43-47 and Col. 8, lines 24-28)

storing said string back to said information appliance. (Col. 4, lines 36-39)

Gunzl et al. do not explicitly disclose joining said new delimited segment to said string.

Everett et al. in analogous art, however, disclose a method joining said new delimited segment to said string. (Col. 4, lines 39-43; Col. 9, lines 16-19)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by Gunzl et al. to include a method joining said new delimited segment to said string. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by Everett et al. (Col. 3, lines 53-56) in order to allow applications to be selectively loaded and deleted from the card, a card issuer can extend additional functionality to an individual IC card without having to issue new cards.

As per claim 18:

Gungl et al. teach all the subject matter as discussed above. Gungl et al. do not explicitly disclose a method of accessing information stored on an information appliance wherein said predetermined segment is replaced back into said string such that the sequence of said plurality of delimited segments after replacing said predetermined segment is different from the sequence of said plurality of delimited segments prior to removing said predetermined segment.

Everett et al. in analogous art, however, disclose a method wherein said predetermined segment is replaced back into said string such that the sequence of said plurality of delimited segments after replacing said predetermined segment is different from the sequence of said plurality of delimited segments prior to removing said predetermined segment. (Col.10, lines 26-42)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by Gungl et al. to include a method wherein said predetermined segment is replaced back into said string such that the sequence of said plurality of delimited segments after replacing said predetermined segment is different from the sequence of said plurality of delimited segments prior to removing said predetermined segment. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by Everett et al. (Col. 11, lines 12-13) in order to allow applications to be selectively stored on the individual cards on virtually any basis.

As per claim 21:

Gungl et al. teach all the subject matter as discussed above. In addition, Gungl et al. further disclose a method of accessing information stored on an information appliance wherein said predetermined segment is deleted from said information appliance by:

reading out said string entirely; (Col. 4, lines 43-47 and Col. 8, lines 24-28)

Gungl et al. do not explicitly disclose removing said predetermined delimiter and said predetermined segment from said string; saving said string back to said information appliance.

Everett et al. in analogous art, however, disclose a method of removing said predetermined delimiter and said predetermined segment from said string; saving said string back to said information appliance. (Col. 4, lines 12-14; Col. 14, lines 43-47)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by Gungl et al. to include a method of removing said predetermined delimiter and said predetermined segment from said string; saving said string back to said information appliance. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by Everett et al. (Col. 3, lines 53-56) in order to allow applications to be selectively loaded and deleted from the card, a card issuer can extend additional functionality to an individual IC card without having to issue new cards.

As per claim 23:

Gungl et al. teach all the subject matter as discussed above. In addition, Gungl et al. further disclose a method of accessing information stored on an information appliance comprising:

processing said predetermined segment; (Col. 4, lines 39-43)

determining a new length of said predetermined segment after being processed, and storing said new length in said first data portion; (Col. 4, lines 36-37)

storing said string on said information appliance. (Col. 3, lines 19-22 and Col. 4, lines 36-39)

removing said predetermined segment, said first data portion, and said predetermined delimiter, from said string;

reuniting said predetermined delimiter, said first data portion, and said predetermined segment with said string; and,

Gungl et al. do not explicitly disclose removing said predetermined segment, said first data portion, and said predetermined delimiter, from said string; reuniting said predetermined delimiter, said first data portion, and said predetermined segment with said string.

Everett et al. in analogous art, however, disclose a method of:

removing said predetermined segment, said first data portion, and said predetermined delimiter, from said string; (Col. 4, lines 12-14; Col. 14, lines 43-47)

reuniting said predetermined delimiter, said first data portion, and said predetermined segment with said string; (Col. 3, lines 43-52)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by Gungl et al. to include a method removing said predetermined segment, said first data portion, and said predetermined delimiter, from said string; reuniting said predetermined delimiter, said first data portion, and said predetermined segment with said string. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by Everett et al. (Col. 3, lines 53-56) in order to allow applications to be selectively loaded and deleted from the card, a card issuer can extend additional functionality to an individual IC card without having to issue new cards.

As per claim 25:

Gungl et al. teach all the subject matter as discussed above. Gungl et al. do not explicitly disclose a method of accessing information stored on an information appliance wherein said predetermined delimiter, said first data portion, and said predetermined segment are reunited with said string by being appended to the end of said string.

Everett et al. in analogous art, however, disclose a method of accessing information stored on an information appliance wherein said predetermined delimiter, said first data portion, and said predetermined segment are reunited with said string by being appended to the end of said string. (Col. 3, lines 43-52; Col. 4, lines 12-14; Col. 14, lines 43-47)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by Gungl et al. to

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include a first application arranged to read said string and modify the contents of said string by editing the contents of a select one of said plurality of delimited segments, removing a select one of said plurality of delimited segments from said string, or adding a new delimited segment to said plurality of delimited segments, wherein said string is written back to said information appliance after the contents are modified. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by Everett et al. (Col. 3, lines 53-56) in order to allow applications to be selectively loaded and deleted from the card, a card issuer can extend additional functionality to an individual IC card without having to issue new cards.

As per claim 26:

Gunzl et al. teach all the subject matter as discussed above. In addition, Gunzl et al. further disclose a method of accessing information stored on an information appliance comprising:

selecting a predetermined delimiter, said predetermined delimiter identifying the location of a predetermined segment in a string stored on said information appliance, said string comprising a plurality of delimited segments; (Col. 9, lines 16-19)

locating said predetermined delimiter within said string; (Col. 8, lines 29-49)

extracting from said string, a first data portion, said first data portion (Col. 4, lines 34-49; ... when a respective application is invoked, the initial and end addresses of the application are loaded from the application table ...)

saving said string back to said information appliance; (Col. 3, lines 19-22)

processing said predetermined segment; (Col. 4, lines 39-43)

determining a new length of said predetermined segment after being processed,
and storing said new length in said first data portion; (Col. 4, lines 36-37)

reuniting said predetermined delimiter, said first data portion, and said
predetermined segment with said string; and, (Col. 4, lines 39-43)

storing said string on said information appliance. (Col. 3, lines 19-22 and Col. 4,
lines 36-39)

Gungl et al. do not explicitly disclose removing said predetermined segment, said
first data portion, and said predetermined delimiter, from said string; rejoining said string
such that said string comprises said plurality of delimited segments except for said
predetermined segment, said first data portion, and said predetermined delimiter; and
processing said predetermined segment.

Everett et al. in analogous art, however, disclose a method of:

removing said predetermined segment, said first data portion, and said
predetermined delimiter, from said string; (Col. 4, lines 12-14; Col. 14, lines 43-47)

rejoining said string such that said string comprises said plurality of delimited
segments except for said predetermined segment, said first data portion, and said
predetermined delimiter; (Col. 3, lines 43-52)

Therefore, it would have been obvious to a person having ordinary skill in the art
at the time the invention was made to modify the method disclosed by Gungl et al. to
include a method removing said predetermined segment, said first data portion, and
said predetermined delimiter, from said string; rejoining said string such that said string

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comprises said plurality of delimited segments except for said predetermined segment, said first data portion, and said predetermined delimiter; and processing said predetermined segment. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by Everett et al. (Col. 3, lines 53-56) in order to allow applications to be selectively loaded and deleted from the card, a card issuer can extend additional functionality to an individual IC card without having to issue new cards.

As per claim 35:

Gungl et al. teach all the subject matter as discussed above. Gungl et al. do not explicitly disclose an information appliance comprising:

a first application arranged to read said string and modify the contents of said string by editing the contents of a select one of said plurality of delimited segments, removing a select one of said plurality of delimited segments from said string, or adding a new delimited segment to said plurality of delimited segments, wherein said string is written back to said information appliance after the contents are modified.

Everett et al. in analogous art, however, disclose an appliance comprising: a first application arranged to read said string and modify the contents of said string by editing the contents of a select one of said plurality of delimited segments, removing a select one of said plurality of delimited segments from said string, or adding a new delimited segment to said plurality of delimited segments, wherein said string is written back to said information appliance after the contents are modified. (Col. 3, lines 43-52; Col. 4, lines 12-14; Col. 14, lines 43-47)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by Gungl et al. to include a first application arranged to read said string and modify the contents of said string by editing the contents of a select one of said plurality of delimited segments, removing a select one of said plurality of delimited segments from said string, or adding a new delimited segment to said plurality of delimited segments, wherein said string is written back to said information appliance after the contents are modified. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by Everett et al. (Col. 3, lines 53-56) in order to allow applications to be selectively loaded and deleted from the card, a card issuer can extend additional functionality to an individual IC card without having to issue new cards.

10. Claims 31-32, 39 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gungl et al. United States Letter Patent Number 5,912,453 and in view of Bjorn United States Letter Patent Number 6,799,275.

As per claim 31:

Gungl et al. disclose all the subject matter as discussed above. Gungl et al. do not explicitly disclose an information appliance wherein at least one of said plurality of delimited segments contains biometric information sufficient to enable said information appliance to determine the identity of a user.

Bjorn in analogous art, however, disclose an information appliance wherein at least one of said plurality of delimited segments contains biometric information sufficient

to enable said information appliance to determine the identity of a user. (Col. 1, lines 50-53; Col. 3, line 26)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the system disclosed by Gungl et al. to include an information appliance wherein at least one of said plurality of delimited segments contains biometric information sufficient to enable said information appliance to determine the identity of a user. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by Bjorn (Col. 1, lines 40-42) in order to provide a better security system that can be certain who is accessing the information appliance.

As per claim 32:

Gungl et al. and Bjorn teach all the subject matter as discussed above. In addition, Bjorn further discloses an information appliance wherein said information appliance further comprises a program arranged to compare said biometric information against identification information entered by said user to verify the identity of said user. (Col. 2, lines 50-51; Col. 3, lines 27-28)

As per claim 39:

Gungl et al. and Bjorn teach all the subject matter as discussed above. In addition, Gungl et al. further disclose a method wherein said information appliance comprises a string of delimited segments, each of said delimited segments containing information associated with a unique application supported by said information appliance. (Col. 3, lines 35-38; Col. 4, lines 1-3 and Col. 9, lines 22-25)

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11. Claims 34 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gungl et al. United States Letter Patent Number 5,912,453 and in view of Bjorn United States Letter Patent Number 6,799,275 and further in view of Chawla et al. United States Letter Patent Number 4,218,738.

As per claim 34:

Gungl et al. teach all the subject matter as discussed above. Gungl et al. do not explicitly disclose an information appliance wherein said string comprises an encrypted string stored on said information appliance such that a predetermined segment must be decrypted prior to use.

Chawla et al. in analogues art, however, further disclose an information appliance wherein said string comprises an encrypted string stored on said information appliance such that a predetermined segment must be decrypted prior to use. (Col. 12, lines 20-24)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by Gungl et al. to include a system wherein said string comprises an encrypted string stored on said information appliance such that a predetermined segment must be decrypted prior to use. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so in order have a high-degree security. This way, the data is protected because it is stored in encrypted format until proper authentication is performed.

As per claim 42:

Gungl et al. and Bjorn teach all the subject matter as discussed above. Both references do not explicitly disclose a method of providing authentication and identification across distributed productivity environments wherein said personal information is stored within said information appliance as encrypted information, and further comprising decrypting said personal information prior to comparing said personal information to said identification information.

Chawla et al. in analogues art, however, further disclose a method wherein said personal information is stored within said information appliance as encrypted information, and further comprising decrypting said personal information prior to comparing said personal information to said identification information. (Col. 12, lines 20-24)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by Gungl et al. and Bjorn to include a method wherein said personal information is stored within said information appliance as encrypted information, and further comprising decrypting said personal information prior to comparing said personal information to said identification information. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so in order to implement a secure authentication system. This way, the data is protected because it is stored in encrypted format until proper authentication is performed.

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12. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gungl et al. United States Letter Patent Number 5,912,453 and in view of Guenther et al. United States Letter Patent Number 6,385,597.

As per claim 8:

Gungl et al. teach all the subject matter as discussed above. Gungl et al. do not explicitly disclose a method of storing information on an information appliance wherein said segments are encrypted using a session key, and said session key is separately encrypted and stored on said information appliance.

Guenther et al. in analogous art, however disclose a method of storing information on an information appliance wherein said segments are encrypted using a session key, and said session key is separately encrypted and stored on said information appliance. (Col.18, lines 50-53)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by Gungl et al. to include a method of storing information on an information wherein said segments are encrypted using a session key, and said session key is separately encrypted and stored on said information appliance. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by Guenther et al. (Col. 3, line 43) in order to assure protection of data against a manipulation.

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13. Claim 33 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bjorn United States Letter Patent Number 6,799,275 and further in view of Teper et al. United States Letter Patent Number 5,815,665.

As per claim 33:

Bjorn teaches all the subject matter as discussed above. Bjorn do not explicitly discloses an information appliance wherein said information appliance is arranged to couple to a distributed productivity environment if the identity of said user is properly verified such that said user is logged into said distributed productivity environment anonymously.

Teper et al. in analogous art, however disclose an information appliance wherein said information appliance is arranged to couple to a distributed productivity environment if the identity of said user is properly verified such that said user is logged into said distributed productivity environment anonymously. (Col. 1, lines 8-11 and Col. 2, lines 38-43)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the system disclosed by Bjorn to include a method of storing information on an information wherein said segments are encrypted using a session key, and said session key is separately encrypted and stored on said information appliance. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by Teper et al. (Col. 4, lines 33-36) in order to have access or service without transmitting

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personal information over the Internet, and without exposing such information to the service providers.

As per claim 41:

Bjorn teaches all the subject matter as discussed above. Bjorn do not explicitly discloses a method of providing authentication and identification across distributed productivity environments wherein said information appliance couples said user to said distributed productivity environment anonymously when access to said distributed productivity environment is allowed.

Teper et al. in analogous art, however disclose a method of providing authentication and identification across distributed productivity environments wherein said information appliance couples said user to said distributed productivity environment anonymously when access to said distributed productivity environment is allowed. (Col. 1, lines 8-11 and Col. 2, lines 38-43)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by Bjorn to include a method of storing information on an information wherein said segments are encrypted using a session key, and said session key is separately encrypted and stored on said information appliance. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by Teper et al. (Col. 4, lines 33-36) in order to have access or service without transmitting personal information over the Internet, and without exposing such information to the service providers.

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14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Merkow, Mark: A Framework for Smartcard Payment Systems -Part Three; August 1, 2000.

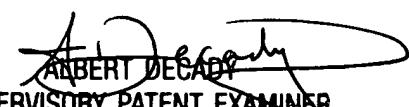
15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shewaye Gelagay whose telephone number is 571-272-4219. The examiner can normally be reached on 8:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on 571-272-3819. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shewaye Gelagay
Examiner
Art Unit 2133

12/30/04


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